

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) An isolated *Bacillus* single-strand binding protein that is encoded by a nucleic acid molecule hybridizing to the complete complement of SEQ ID NO: 175 under hybridization conditions that are at least as stringent as use of a medium comprising ~~0.9M sodium citrate buffer at a temperature of 37°C~~ 5X sodium citrate buffer and at a temperature of 65°C, followed by washing in 5X sodium citrate buffer at 65°C, wherein the isolated single-strand binding protein binds to single-stranded DNA.

2. (Original) The isolated *Bacillus* single-strand binding protein according to claim 1 wherein the *Bacillus* species is *Bacillus stearothermophilus*.

3-4 (Cancelled)

5. The isolated *Bacillus* single-strand binding protein according to claim 1 wherein the single-strand binding protein is purified.

6. (Original) A DNA-protein complex comprising:
a DNA molecule comprising a single-stranded region and
a single-strand binding protein according to claim 1 that is bound to the single-stranded region of the DNA molecule.

7. (Original) A kit comprising:
a container that contains therein either a deoxynucleoside triphosphate or a dideoxynucleoside triphosphate;
a container that contains therein a DNA polymerase III-type enzyme complex; and
a container that contains therein a single-strand binding protein according to claim 1.

8-9. (Cancelled)

10. (Previously presented) An isolated *Bacillus* single-strand binding protein according to claim 1, wherein the single-strand binding protein encoded by the nucleic acid molecule is at least 80 percent identical to the amino acid sequence of SEQ ID NO: 176.

11. (Previously presented) An isolated *Bacillus* single-strand binding protein according to claim 1, wherein the single-strand binding protein encoded by the nucleic acid molecule is at least 90 percent identical to the amino acid sequence of SEQ ID NO: 176.

12. (Previously presented) An isolated *Bacillus* single-strand binding protein according to claim 1, wherein the single-strand binding protein encoded by the nucleic acid molecule is at least 95 percent identical to the amino acid sequence of SEQ ID NO: 176.

13. (Previously presented) An isolated *Bacillus* single-strand binding protein according to claim 1, wherein the nucleic acid molecule is at least 90 percent identical to the nucleotide sequence of SEQ ID NO: 175.

14. (Previously presented) An isolated *Bacillus* single-strand binding protein according to claim 1, wherein the nucleic acid molecule is at least 95 percent identical to the nucleotide sequence of SEQ ID NO: 175.

15. (Previously presented) An isolated single-strand binding protein comprising the amino acid sequence of SEQ ID NO: 176.

16. (Previously presented) A DNA-protein complex comprising:
a DNA molecule comprising a single-stranded region and
a single-strand binding protein according to claim 15 that is bound to the single-stranded region of the DNA molecule.

17. (Previously presented) A kit comprising:
a container that contains therein either a deoxynucleoside triphosphate or a dideoxynucleoside triphosphate;
a container that contains therein a DNA polymerase III-type enzyme complex; and
a container that contains therein a single-strand binding protein according to claim 15.